00417902.TXT

<110>   Sun-Chang Kim
         In-Yup Park
         Ju-Hyun Cho

<120>   ANTIMICROBIAL PEPTIDE, ITS ANALOGS AND ANTIMICROBIAL
         COMPOSITION COMPRISING THEM

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Arg Arg Val Val Arg
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<400>   2
Lys Val Val Lys Gln Trp Pro Ile Gly Lys Val Val Lys Lys Val Val
 1   5   10   15

Lys Lys Val Val Lys
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<400>   3
Arg Leu Leu Arg Gln Trp Pro Ile Gly Arg Leu Leu Arg Arg Leu Leu
 1   5   10   15

Arg Arg Leu Leu Arg
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Lys Leu Leu Lys Gln Trp Pro Ile Gly Lys Leu Leu Lys Lys Leu Leu
 1   5   10   15

Lys Lys Leu Leu Lys
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Arg Val Leu Arg Gln Trp Pro Ile Gly Arg Val Leu Arg Arg Val Leu
 1   5   10   15

Arg Arg Val Leu Arg
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<400>   6
Lys Val Leu Lys Gln Trp Pro Ile Gly Lys Val Leu Lys Lys Val Leu
 1   5   10   15

Lys Lys Val Leu Lys
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<400> 7
Arg Leu Val Arg Gln Trp Pro Ile Gly Arg Leu Val Arg Arg Leu Val
1   5   10   15

Arg Arg Leu Val Arg
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<400> 8
Lys Leu Val Lys Gln Trp Pro Ile Gly Lys Leu Val Lys Lys Leu Val
1   5   10   15

Lys Lys Leu Val Lys
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1   5   10   15

Lys Arg Val Val Lys
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<400> 10
Lys Val Val Arg Gln Trp Pro Ile Gly Lys Val Val Arg Lys Val Val
1   5   10   15

Arg Lys Val Val Arg
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<210>   11
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<400>   11
Arg Leu Leu Lys Gln Trp Pro Ile Gly Arg Leu Leu Lys Arg Leu Leu
 1   5   10   15

Lys Arg Leu Leu Lys
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<210>   12
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Lys Leu Leu Arg Gln Trp Pro Ile Gly Lys Leu Leu Arg Lys Leu Leu
 1   5   10   15

Arg Lys Leu Leu Arg
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Arg Val Leu Lys Gln Trp Pro Ile Gly Arg Val Leu Lys Arg Val Leu
 1   5   10   15

Lys Arg Val Leu Lys
              20

<210>   14
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 1   5   10   15

Arg Lys Val Leu Arg
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<400>   15
Arg Leu Val Lys Gln Trp Pro Ile Gly Arg Leu Val Lys Arg Leu Val
 1   5   10   15

Lys Arg Leu Val Lys
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Lys Leu Val Arg Gln Trp Pro Ile Gly Lys Leu Val Arg Lys Leu Val
 1   5   10   15

Arg Lys Leu Val Arg
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<210>   17
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<400>   17
Lys Leu Val Arg Gln Phe Pro Val Gly Lys Leu Val Arg Lys Leu Val
 1   5   10   15

Arg Lys Leu Val Arg
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<210>   18
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<400>   18
Arg Val Val Arg Asn Trp Pro Ile Gly Arg Val Val Arg Arg Val Val
 1   5   10   15

Arg Arg Val Val Arg
            20

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 1   5   10   15

Lys Lys Val Val Lys
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<400>   20
Arg Leu Leu Arg Asn Trp Pro Ile Gly Arg Leu Leu Arg Arg Leu Leu
 1   5   10   15

Arg Arg Leu Leu Arg
            20

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<400>   21
Lys Leu Leu Lys Asn Trp Pro Ile Gly Lys Leu Leu Lys Lys Leu Leu
 1   5   10   15

Lys Lys Leu Leu Lys
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<210>    22
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<400>    22
Arg Val Leu Arg Asn Trp Pro Ile Gly Arg Val Leu Arg Arg Val Leu
 1                5                  10                  15

Arg Arg Val Leu Arg
              20


<210>    23
<211>    21
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<220>
<223>    antimicrobial peptide


<400>    23
Lys Val Leu Lys Asn Trp Pro Ile Gly Lys Val Leu Lys Lys Val Leu
 1                5                  10                  15

Lys Lys Val Leu Lys
              20


<210>    24
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<220>
<223>    antimicrobial peptide


<400>    24
Arg Leu Val Arg Asn Trp Pro Ile Gly Arg Leu Val Arg Arg Leu Val
 1                5                  10                  15

Arg Arg Leu Val Arg
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<210>    25
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<223>    antimicrobial peptide


<400>    25
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Lys Leu Val Lys Asn Trp Pro Ile Gly Lys Leu Val Lys Lys Leu Val
1   5   10   15

Lys Lys Leu Val Lys
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Arg Val Val Lys Asn Trp Pro Ile Gly Arg Val Val Lys Arg Val Val
1   5   10   15

Lys Arg Val Val Lys
            20

<210>   27
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<212>   PRT
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<220>
<223>   antimicrobial peptide

<400>   27
Lys Val Val Arg Asn Trp Pro Ile Gly Lys Val Val Arg Lys Val Val
1   5   10   15

Arg Lys Val Val Arg
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<210>   28
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<220>
<223>   antimicrobial peptide

<400>   28
Arg Leu Leu Lys Asn Trp Pro Ile Gly Arg Leu Leu Lys Arg Leu Leu
1   5   10   15

Lys Arg Leu Leu Lys
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<210>   29
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<400>   29
Lys Leu Leu Arg Asn Trp Pro Ile Gly Lys Leu Leu Arg Lys Leu Leu
 1   5   10   15

Arg Lys Leu Leu Arg
          20

<210>   30
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<220>
<223>   antimicrobial peptide

<400>   30
Arg Val Leu Lys Asn Trp Pro Ile Gly Arg Val Leu Lys Arg Val Leu
 1   5   10   15

Lys Arg Val Leu Lys
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<210>   31
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<400>   31
Lys Val Leu Arg Asn Trp Pro Ile Gly Lys Val Leu Arg Lys Val Leu
 1   5   10   15

Arg Lys Val Leu Arg
          20

<210>   32
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<220>
<223>   antimicrobial peptide

<400>   32
Arg Leu Val Lys Asn Trp Pro Ile Gly Arg Leu Val Lys Arg Leu Val
 1   5   10   15

Lys Arg Leu Val Lys
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<210>      33
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<220>
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<400>      33
Lys Leu Val Arg Asn Trp Pro Ile Gly Lys Leu Val Arg Lys Leu Val
  1               5                  10                  15

Arg Lys Leu Val Arg
            20


<210>      34
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<212>      PRT
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<223>      antimicrobial peptide


<400>      34
Lys Leu Val Arg Asn Phe Pro Val Gly Lys Leu Val Arg Lys Leu Val
  1               5                  10                  15

Arg Lys Leu Val Arg
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<210>      35
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<400>      35
Arg Val Val Arg Arg Val Val Arg Arg Val Val Arg Gln Trp Pro Ile
  1               5                  10                  15

Gly Arg Val Val Arg
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<210>      36
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<400>      36
Lys Val Val Lys Lys Val Val Lys Lys Val Val Lys Gln Trp Pro Ile
  1               5                  10                  15
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Gly Lys Val Val Lys
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<210>   37
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<400>   37
Arg Leu Leu Arg Arg Leu Leu Arg Arg Leu Leu Arg Gln Trp Pro Ile
 1   5   10   15

Gly Arg Leu Leu Arg
            20

<210>   38
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<213>   Artificial Sequence

<220>
<223>   antimicrobial peptide

<400>   38
Lys Leu Leu Lys Lys Leu Leu Lys Lys Leu Leu Lys Gln Trp Pro Ile
 1   5   10   15

Gly Lys Leu Leu Lys
            20

<210>   39
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<212>   PRT
<213>   Artificial Sequence

<220>
<223>   antimicrobial peptide

<400>   39
Arg Val Leu Arg Arg Val Leu Arg Arg Val Leu Arg Gln Trp Pro Ile
 1   5   10   15

Gly Arg Val Leu Arg
            20

<210>   40
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<220>
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Lys Val Leu Lys Lys Val Leu Lys Lys Val Leu Lys Gln Trp Pro Ile
 1   5   10   15

Gly Lys Val Leu Lys
            20

<210> 41
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<220>
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<400> 41
Arg Leu Val Arg Arg Leu Val Arg Arg Leu Val Arg Gln Trp Pro Ile
 1   5   10   15

Gly Arg Leu Val Arg
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<400> 42
Lys Leu Val Lys Lys Leu Val Lys Lys Leu Val Lys Gln Trp Pro Ile
 1   5   10   15

Gly Lys Leu Val Lys
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<210> 43
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Arg Val Val Lys Arg Val Val Lys Arg Val Val Lys Gln Trp Pro Ile
 1   5   10   15

Gly Arg Val Val Lys
            20

<210> 44
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<212>   PRT
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1   5   10   15

Gly Lys Val Val Arg
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<220>
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Arg Leu Leu Lys Arg Leu Leu Lys Arg Leu Leu Lys Gln Trp Pro Ile
1   5   10   15

Gly Arg Leu Leu Lys
            20

<210>   46
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<220>
<223>   antimicrobial peptide

<400>   46
Lys Leu Leu Arg Lys Leu Leu Arg Lys Leu Leu Arg Gln Trp Pro Ile
1   5   10   15

Gly Lys Leu Leu Arg
            20

<210>   47
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<212>   PRT
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<220>
<223>   antimicrobial peptide

<400>   47
Arg Val Leu Lys Arg Val Leu Lys Arg Val Leu Lys Gln Trp Pro Ile
1   5   10   15

Gly Arg Val Leu Lys

20

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<210>    48
<211>    21
<212>    PRT
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<220>
<223>    antimicrobial peptide


<400>    48
Lys Val Leu Arg Lys Val Leu Arg Lys Val Leu Arg Gln Trp Pro Ile
 1               5                10                15

Gly Lys Val Leu Arg
            20


<210>    49
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<220>
<223>    antimicrobial peptide


<400>    49
Arg Leu Val Lys Arg Leu Val Lys Arg Leu Val Lys Gln Trp Pro Ile
 1               5                10                15

Gly Arg Leu Val Lys
            20


<210>    50
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<212>    PRT
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<220>
<223>    antimicrobial peptide


<400>    50
Lys Leu Val Arg Lys Leu Val Arg Lys Leu Val Arg Gln Trp Pro Ile
 1               5                10                15

Gly Lys Leu Val Arg
            20


<210>    51
<211>    21
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<220>
<223>    antimicrobial peptide
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Lys Leu Val Arg Lys Leu Val Arg Lys Leu Val Arg Gln Phe Pro Val
1               5               10              15

Gly Lys Leu Val Arg
            20


<210>   52
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<212>   PRT
<213>   Artificial Sequence

<220>
<223>   antimicrobial peptide


<400>   52
Arg Val Val Arg Arg Val Val Arg Arg Val Val Arg Asn Trp Pro Ile
1               5               10              15

Gly Arg Val Val Arg
            20


<210>   53
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<220>
<223>   antimicrobial peptide


<400>   53
Lys Val Val Lys Lys Val Val Lys Lys Val Val Lys Asn Trp Pro Ile
1               5               10              15

Gly Lys Val Val Lys
            20


<210>   54
<211>   21
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<220>
<223>   antimicrobial peptide


<400>   54
Arg Leu Leu Arg Arg Leu Leu Arg Arg Leu Leu Arg Asn Trp Pro Ile
1               5               10              15

Gly Arg Leu Leu Arg
            20


<210>   55
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<213>   Artificial Sequence
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<220>
<223>   antimicrobial peptide

<400>   55
Lys Leu Leu Lys Lys Leu Leu Lys Lys Leu Leu Lys Asn Trp Pro Ile
 1   5   10   15

Gly Lys Leu Leu Lys
            20

<210>   56
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<212>   PRT
<213>   Artificial Sequence

<220>
<223>   antimicrobial peptide

<400>   56
Arg Val Leu Arg Arg Val Leu Arg Arg Val Leu Arg Asn Trp Pro Ile
 1   5   10   15

Gly Arg Val Leu Arg
            20

<210>   57
<211>   21
<212>   PRT
<213>   Artificial Sequence

<220>
<223>   antimicrobial peptide

<400>   57
Lys Val Leu Lys Lys Val Leu Lys Lys Val Leu Lys Asn Trp Pro Ile
 1   5   10   15

Gly Lys Val Leu Lys
            20

<210>   58
<211>   21
<212>   PRT
<213>   Artificial Sequence

<220>
<223>   antimicrobial peptide

<400>   58
Arg Leu Val Arg Arg Leu Val Arg Arg Leu Val Arg Asn Trp Pro Ile
 1   5   10   15

Gly Arg Leu Val Arg
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<210>    59
<211>    21
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<220>
<223>    antimicrobial peptide


<400>    59
Lys Leu Val Lys Lys Leu Val Lys Lys Leu Val Lys Asn Trp Pro Ile
 1               5                  10                  15

Gly Lys Leu Val Lys
            20


<210>    60
<211>    21
<212>    PRT
<213>    Artificial Sequence

<220>
<223>    antimicrobial peptide


<400>    60
Arg Val Val Lys Arg Val Val Lys Arg Val Val Lys Asn Trp Pro Ile
 1               5                  10                  15

Gly Arg Val Val Lys
            20


<210>    61
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<212>    PRT
<213>    Artificial Sequence

<220>
<223>    antimicrobial peptide


<400>    61
Lys Val Val Arg Lys Val Val Arg Lys Val Val Arg Asn Trp Pro Ile
 1               5                  10                  15

Gly Lys Val Val Arg
            20


<210>    62
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<212>    PRT
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<223>    antimicrobial peptide


<400>    62
Arg Leu Leu Lys Arg Leu Leu Lys Arg Leu Leu Lys Asn Trp Pro Ile
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                 1                    5                    10                    15
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Gly Arg Leu Leu Lys
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<210>   63
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<400>   63
Lys Leu Leu Arg Lys Leu Leu Arg Lys Leu Leu Arg Asn Trp Pro Ile
 1   5   10   15

Gly Lys Leu Leu Arg
            20

<210>   64
<211>   21
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<223>   antimicrobial peptide

<400>   64
Arg Val Leu Lys Arg Val Leu Lys Arg Val Leu Lys Asn Trp Pro Ile
 1   5   10   15

Gly Arg Val Leu Lys
            20

<210>   65
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<400>   65
Lys Val Leu Arg Lys Val Leu Arg Lys Val Leu Arg Asn Trp Pro Ile
 1   5   10   15

Gly Lys Val Leu Arg
            20

<210>   66
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<220>

<223>   antimicrobial peptide

<400>   66
Arg Leu Val Lys Arg Leu Val Lys Arg Leu Val Lys Asn Trp Pro Ile
 1   5   10   15

Gly Arg Leu Val Lys
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<210>   67
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<220>
<223>   antimicrobial peptide

<400>   67
Lys Leu Val Arg Lys Leu Val Arg Lys Leu Val Arg Asn Trp Pro Ile
 1   5   10   15

Gly Lys Leu Val Arg
            20

<210>   68
<211>   21
<212>   PRT
<213>   Artificial Sequence

<220>
<223>   antimicrobial peptide

<400>   68
Lys Leu Val Arg Lys Leu Val Arg Lys Leu Val Arg Asn Phe Pro Val
 1   5   10   15

Gly Lys Leu Val Arg
            20

<210>   69
<211>   21
<212>   PRT
<213>   Artificial Sequence

<220>
<223>   antimicrobial peptide

<220>
<221>   MOD_RES
<222>   (21)
<223>   AMIDATION,

<400>   69
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 1   5   10   15

Arg Lys Leu Val Arg
            20

<210>   70
<211>   21
<212>   PRT
<213>   Artificial Sequence

<220>
<223>   antimicrobial peptide

<220>
<221>   MOD_RES
<222>   (21)
<223>   AMIDATION,

<400>   70
Arg Leu Val Lys Asn Trp Pro Ile Gly Arg Leu Val Lys Arg Leu Val
  1   5   10   15

Lys Arg Leu Val Lys
            20

<210>   71
<211>   21
<212>   PRT
<213>   Artificial Sequence

<220>
<223>   antimicrobial peptide

<220>
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<222>   (21)
<223>   AMIDATION,

<400>   71
Lys Val Leu Arg Lys Val Leu Arg Lys Val Leu Arg Gln Trp Pro Ile
  1   5   10   15

Gly Lys Val Leu Arg
            20

<210>   72
<211>   21
<212>   PRT
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<220>
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<220>
<221>   MOD_RES
<222>   (21)

<223>   AMIDATION,

<400>   72
Arg Val Leu Lys Arg Val Leu Lys Arg Val Leu Lys Asn Trp Pro Ile
 1   5   10   15

Gly Arg Val Leu Lys
            20